

TABLE 4.1. CONSTRUCTION STANDARDS FOR UNITS⁽¹⁾

Waste Mgmt Unit Classification	Type of Waste Management Unit	Clay Liner ⁽²⁾	Synthetic Liner	Leachate Collection and Rem. System	Subsurface Barriers			Capacity of Precip. & Drain. Control Facilities (Design Storm)	Seismic Design
					Cutoff Walls	Grout Curtains			
Class II	Non MSW Landfill	Required ⁽³⁾ , #1x10 ⁻⁶ cm/sec	Not required	Required, blanket type	Required	#1x10 ⁻⁶ cm/sec ⁽¹¹⁾	#1x10 ⁻⁶ cm/sec	1000-year 24-hour precipitation	Withstand maximum credible earthquake
Class II	MSW Landfill ⁽¹³⁾	Special ⁽¹³⁾	Special ⁽¹³⁾	Special ⁽¹³⁾	Required	#1x10 ⁻⁶ cm/sec ⁽¹¹⁾	#1x10 ⁻⁶ cm/sec	1000-year 24-hour precipitation	Withstand maximum credible earthquake
Class II	Surface Impoundment	Double or single required ⁽⁶⁾ , #1x10 ⁻⁶ cm/sec	Not required	Required with double liner, blanket type	Not Required	#1x10 ⁻⁶ cm/sec ⁽¹¹⁾	#1x10 ⁻⁶ cm/sec	1000-year 24-hour precipitation	Withstand maximum credible earthquake
Class II	Waste Pile	Optional ^(4,5) , #1x10 ⁻⁶ cm/sec	Not required	May be required, blanket type	May be required	#1x10 ⁻⁶ cm/sec ⁽¹¹⁾	#1x10 ⁻⁶ cm/sec	1000-year 24-hour precipitation	Withstand maximum credible earthquake

Class III	Non MSW Landfill	Optional, #1x10 ⁻⁶ cm/sec (see §20260)	Not required	Required if liner is required, blanket or dentritic	Required	#1x10 ⁻⁶ cm/sec, if required	#1x10 ⁻⁶ cm/sec, if required	100-year, 24-hour precipitation ⁽¹²⁾	Withstand at least the maximum probable earthquake (see §20370)
Class III	MSW Landfill ⁽¹³⁾	Special ⁽¹³⁾	Special ⁽¹³⁾	Special ⁽¹³⁾	Required	#1x10 ⁻⁶ cm/sec, if required	#1x10 ⁻⁶ cm/sec, if required	100-year, 24-hour precipitation	Withstand at least the maximum probable earthquake (see §20370)

- 1 Applicable regulations in this article may provide for exemptions to certain requirements. §20310(d) describes applicability to existing facilities.
- 2 All permeabilities specified in this table are maximum allowable permeabilities.
- 3 [Reserved]
- 4 *Note: This footnote left in Ch-15 (of Division 3, Title 23, CCR), as it applies only to Class I Units.*
A synthetic liner alone may be allowed based on nature of waste to be contained and duration of the operation. A waste pile with a synthetic liner alone may not be closed as a landfill pursuant to §21410 of this subchapter. The synthetic liner hydraulic conductivity shall be the same or less than that which would be required for a clay liner.
- 5 Clay liner required unless Units are underlain by a substantial thickness of natural geologic materials with hydraulic conductivity of 1x10⁻⁶ cm/sec [i.e., 1 foot/year] or less.
- 6 Single liner shall be a clay liner and removed or replaced as described in §20330. Double liner systems shall have either an outer clay liner or shall be underlain by a substantial thickness of natural geologic materials with an hydraulic conductivity of 1x10⁻⁶ cm/sec [i.e., 1 foot/year] or less to act as an outer liner.
- 7 [Reserved]
- 8 [Reserved]
- 9 [Reserved]
- 10 [Reserved]
- 11 Cutoff walls required where there is potential for lateral movement of fluid, including waste or leachate, and the hydraulic conductivity of natural geologic materials is used for waste containment.
- 12 For Units other than MSW landfills, the RWQCB can grant an exemption to this design storm requirement if the discharger can demonstrate that the integrity of facilities will not be jeopardized if this criterion is not met.
- 13 All Class II or Class III landfills that received MSW at any time and that received solid waste after October 9, 1991 (MSW landfills) are subject to the additional state and federal requirements contained (or incorporated by reference) in SWRCB Resolution No. 93-62.